

## SEQUENCE LISTING

<110> ORMANDY, CHRISTOPHER J.  
NAYLOR, MATTHEW JOHN

<120> METHOD FOR INDUCING MAMMARY EPITHELIAL CELL  
DIFFERENTIATION

<130> 026470-0401

<140> 10/529,094

<141> 2003-09-25

<150> PCT/AU03/001266

<151> 2003-09-25

<150> 60/413,978

<151> 2002-09-25

<160> 31

<170> PatentIn Ver. 3.3

<210> 1

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 1

Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Pro  
1 5 10

<210> 2

<211> 30

<212> PRT

<213> Homo sapiens

<400> 2

Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Pro His Ala Val  
1 5 10 15

Gly Asn His Arg Ser Phe Ser Asp Lys Asn Gly Leu Thr Ser  
20 25 30

<210> 3

<211> 29

<212> PRT

<213> Bos taurus

<400> 3

Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Pro His Ala Leu  
1 5 10 15

Asp Ser His Arg Ser Phe Gln Asp Lys His Gly Leu Ala  
                   20                  25

<210> 4  
 <211> 29  
 <212> PRT  
 <213> Sus scrofa

<400> 4  
 Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Pro His Ala Ile  
   1                  5                  10                  15

Asp Asn His Arg Ser Phe His Asp Lys Tyr Gly Leu Ala  
                   20                  25

<210> 5  
 <211> 29  
 <212> PRT  
 <213> Rattus rattus

<400> 5  
 Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Pro His Ala Ile  
   1                  5                  10                  15

Asp Asn His Arg Ser Phe Ser Asp Lys His Gly Leu Thr  
                   20                  25

<210> 6  
 <211> 29  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           peptide

<400> 6  
 Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Pro His Ala Val  
   1                  5                  10                  15

Asn His Arg Ser Phe Ser Asp Lys Asn Gly Leu Thr Ser  
                   20                  25

<210> 7  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 7  
 Met Ala Arg Gly Ser Ala Leu Leu Leu Ala Ser Leu Leu Leu Ala Ala  
   1                  5                  10                  15

Ala Leu Ser Ala Ser Ala Gly Leu Trp Ser Pro Ala Lys Glu Lys Arg  
                   20                                  25                                  30

Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Pro His Ala Val  
                   35                                  40                                  45

Gly Asn His Arg Ser Phe Ser Asp Lys Asn Gly Leu Thr Ser Lys Arg  
                   50                                  55                                  60

Glu Leu Arg Pro Glu Asp Asp Met Lys Pro Gly Ser Phe Asp Arg Ser  
                   65                                  70                                  75                                  80

Ile Pro Glu Asn Asn Ile Met Arg Thr Ile Ile Glu Phe Leu Ser Phe  
                                   85                                  90                                  95

Leu His Leu Lys Glu Ala Gly Ala Leu Asp Arg Leu Leu Asp Leu Pro  
                                   100                                  105                                  110

Ala Ala Ala Ser Ser Glu Asp Ile Glu Arg Ser  
                   115                                  120

<210> 8

<211> 123

<212> PRT

<213> Bos taurus

<400> 8

Met Pro Arg Gly Ser Val Leu Leu Leu Ala Ser Leu Leu Leu Ala Ala  
                   1                                  5                                  10                                  15

Ala Leu Ser Ala Thr Leu Gly Leu Gly Ser Pro Val Lys Glu Lys Arg  
                   20                                  25                                  30

Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Pro His Ala Leu  
                   35                                  40                                  45

Asp Ser His Arg Ser Phe Gln Asp Lys His Gly Leu Ala Gly Lys Arg  
                   50                                  55                                  60

Glu Leu Glu Pro Glu Asp Glu Ala Arg Pro Gly Ser Phe Asp Arg Pro  
                   65                                  70                                  75                                  80

Leu Ala Glu Asn Asn Val Val Arg Thr Ile Ile Glu Phe Leu Thr Phe  
                                   85                                  90                                  95

Leu His Leu Lys Asp Ala Gly Ala Leu Glu Arg Leu Pro Ser Leu Pro  
                                   100                                  105                                  110

Thr Ala Glu Ser Ala Glu Asp Ala Glu Arg Ser  
                   115                                  120

<210> 9

<211> 123

<212> PRT

<213> Sus scrofa

&lt;400&gt; 9

Met Pro Arg Gly Cys Ala Leu Leu Leu Ala Ser Leu Leu Leu Ala Ser  
 1 5 10 15

Ala Leu Ser Ala Thr Leu Gly Leu Gly Ser Pro Val Lys Glu Lys Arg  
 20 25 30

Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Pro His Ala Ile  
 35 40 45

Asp Asn His Arg Ser Phe His Asp Lys Tyr Gly Leu Ala Gly Lys Arg  
 50 55 60

Glu Leu Glu Pro Glu Asp Glu Ala Arg Pro Gly Gly Phe Asp Arg Leu  
 65 70 75 80

Gln Ser Glu Asp Lys Ala Ile Arg Thr Ile Met Glu Phe Leu Ala Phe  
 85 90 95

Leu His Leu Lys Glu Ala Gly Ala Leu Gly Arg Leu Pro Gly Leu Pro  
 100 105 110

Ser Ala Ala Ser Ser Glu Asp Ala Gly Gln Ser  
 115 120

&lt;210&gt; 10

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 10

Met Ala Pro Pro Ser Val Pro Leu Val Leu Leu Leu Val Leu Leu Leu  
 1 5 10 15

Ser Leu Ala Glu Thr Pro Ala Ser Ala Pro Ala His Arg Gly Arg Gly  
 20 25 30

Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Pro Val Leu His  
 35 40 45

Leu Pro Gln Met Gly Asp Gln Asp Gly Lys Arg Glu Thr Ala Leu Glu  
 50 55 60

Ile Leu Asp Leu Trp Lys Ala Ile Asp Gly Leu Pro Tyr Ser His Pro  
 65 70 75 80

Pro Gln Pro Ser Lys Arg Asn Val Met Glu Thr Phe Ala Lys Pro Glu  
 85 90 95

Ile Gly Asp Leu Gly Met Leu Ser Met Lys Ile Pro Lys Glu Glu Asp  
 100 105 110

Val Leu Lys Ser  
 115

<210> 11  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 11  
 Ala Pro Ala His Arg Gly Arg Gly Gly Trp Thr Leu Asn Ser Ala Gly  
           1                  5                  10                  15  
 Tyr Leu Leu Gly Pro Val Leu His Leu Pro Gln Met Gly Asp Gln Asp  
                   20                  25                  30  
 Gly Lys Arg Glu Thr Ala Leu Glu Ile Leu Asp Leu Trp Lys Ala Ile  
                   35                  40                  45  
 Asp Gly Leu Pro Tyr Ser His Pro Pro Gln Pro Ser  
           50                  55                  60

<210> 12  
 <211> 60  
 <212> PRT  
 <213> Sus scrofa

<400> 12  
 Ala Pro Val His Arg Gly Arg Gly Gly Trp Thr Leu Asn Ser Ala Gly  
           1                  5                  10                  15  
 Tyr Leu Leu Gly Pro Val Leu His Pro Pro Ser Arg Ala Glu Gly Gly  
                   20                  25                  30  
 Gly Lys Gly Lys Thr Ala Leu Gly Ile Leu Asp Leu Trp Lys Ala Ile  
                   35                  40                  45  
 Asp Gly Leu Pro Tyr Pro Gln Ser Gln Leu Ala Ser  
           50                  55                  60

<210> 13  
 <211> 60  
 <212> PRT  
 <213> Rattus rattus

<400> 13  
 Ala Pro Ala His Arg Gly Arg Gly Gly Trp Thr Leu Asn Ser Ala Gly  
           1                  5                  10                  15  
 Tyr Leu Leu Gly Pro Val Leu His Leu Ser Ser Lys Ala Asn Gly Gly  
                   20                  25                  30  
 Arg Lys Thr Asp Ser Ala Leu Glu Ile Leu Asp Leu Trp Lys Ala Ile  
                   35                  40                  45  
 Asp Gly Leu Arg Tyr Ser Arg Ser Pro Arg Met Thr  
           50                  55                  60

<210> 14  
 <211> 765  
 <212> DNA  
 <213> Homo sapiens

```
<400> 14
ccacgcgtcc gggacccggc ccgcgccttc tgcccttgcg gccggccgcg ccatgcggtg 60
agcgccccag gccgccagag cccacccgac ccggcccgcg gcccggaact gccgcccaga 120
cccgccaccg caccgcggacc ccgacgctcc gaacccgggc gcagccgcag ctcaagatgg 180
cccgaggcag cgccctcctt ctgcctccc tctcctcgc cgcgccctt tctgcctctg 240
cggggctctg gtcgccggcc aaggaaaaac gaggctggac cctgaacagc gcgggctacc 300
tgctgggccc acatgccgtt ggcaaccaca ggtcattcag cgacaagaat ggctcacca 360
gcaagcggga gctgcggccc gaagatgaca tgaaaccagg aagctttgac aggtccatac 420
ctgaaaacaa tatcatgcgc acaatcattg agtttctgtc tttcttgcat ctcaaagagg 480
ccggtgcctt cgaccgcctc ctggatctcc ccgccgcagc ctctcagaa gacatcgagc 540
ggctctgaga gcctcctggg catgtttgtc tgtgtgctgt aacctgaagt caaaccttaa 600
gataatggat aatcttcggc caatttatgc agagtcagcc attcctgttc tctttgcctt 660
gatgttgtgt tgttatcatt taagattttt tttttttggt aattattttt agtggcaaaa 720
taaagaatag caattaaaaa aaaaaaaaca aaaaaaaaaa aaaaaa 765
```

<210> 15  
 <211> 675  
 <212> DNA  
 <213> Bos taurus

```
<400> 15
cttcgcgctc cccgaggccg cgccatgcgg tgagcgtccc cggccctgcc ccgacccgac 60
tcgacggacg cgcggccccc ccgacacagg acctgcagac accccaggac ccgcagacat 120
ccccgacccc tccgggcccc gctcaagatg ccagaggct ccgtcctgct gctcgcctcc 180
ctgctcctcg cagcgccctt ttcagccacc ctgggctcgc ggtcaccggt gaaggagaag 240
agaggctgga cctgaacag cgctgggtac ctctcggac cacatgcgct cgacagccac 300
aggtcatttc aagacaagca tggcctcgcc ggcaagcggg aactcgagcc tgaagacgaa 360
gcccggccag gaagctttga cagaccactg gcggagaaca acgtcgtgcg cacgataatc 420
gagtttctga ctttcctgca tctcaaagac gccggcgccc tggagcgctt gccagtcctc 480
cccacagcag agtcgcgaga agacgccgag aggtcctgag cgggctcccg cgctcggtc 540
tccctgtgtc acgcgcagtc gtgctcccag gaggatgccc atcgcatggc aaccgccccca 600
tccccgctgc cctgatgctg tgtccgtacc atttcagggt tttccccctt ggtcataagt 660
ttcagtggca aaatt 675
```

<210> 16  
 <211> 774  
 <212> DNA  
 <213> Sus scrofa

```
<400> 16
acacgtcgaa ggagcccggc tgccgcgctt ccctctctgt gtccccgagg ccacgccatg 60
cggtgagcgc cctccagccc tgcccgaccc aaccggaccc gcgtccccgc cgacagccca 120
ggacccgctg gcacccgggg accccctggc atctcagacc cgccgacccc cggggcccg 180
cgacacccca agaccaccg aactccggg acccgccgtc gctcaagatg ccagaggct 240
gcgccctcct gctggcctcc ctactcctcg cttcggccct ttcagccacc ctggggctcg 300
ggtcaccggt gaaggaaaag agaggctgga ctctgaacag cgctggctac cttcttgggc 360
cacatgccat cgacaaccac agatcattcc acgacaagta tggccttgcg ggcaagcggg 420
aactcgaaac cgaagacgaa gccaggccgg gaggttttga ccggctgcag tcagaggaca 480
aagccatacg cacgataatg gagtttctgg ctttcttgca tctcaaagag gcgggggccc 540
tggggcgcct gcccggcctc ccctcggcag catcctcaga agacgcggga cagtccctgag 600
gtggctccgc catcttcgtc tcggcggtgt cgagctccga gacggtgacg gtctcacgcc 660
```

agcgaaggca gcgtaaccac ccctgtcgtc cctgcccagt gctgtggtgc tgtgggtgtca 720  
gatcttcttc ctttgggagt aggtttgagc cgcaaaataa aaactgcagc tgct 774

<210> 17  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
primer

<400> 17  
tgcagtaagc gaccatccag 20

<210> 18  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
primer

<400> 18  
agcacaggac acacgtgcac 20

<210> 19  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
primer

<400> 19  
cgccttcac tgcaagttta 20

<210> 20  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
primer

<400> 20  
caggacggtc tgtgcagt 18

<210> 21  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 21  
 tgcctttcca ggccaccatc 20

<210> 22  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 22  
 gcgtaagtgg cacgcgtgag 20

<210> 23  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 23  
 cctggctctt tggggctttc gtg . 23

<210> 24  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 24  
 agcgcgtaga gcgcggccac tg 22

<210> 25  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence



<220>  
 <223> Description of Artificial Sequence: Synthetic  
           primer  
  
 <400> 25  
 tgacatcaag aaggtggtga agc 23  
  
 <210> 26  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic  
           primer  
  
 <400> 26  
 aaggtggaag agtgggagtt gctg 24  
  
 <210> 27  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic  
           oligonucleotide  
  
 <400> 27  
 aatggccacg tagcgatcca 20  
  
 <210> 28  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic  
           oligonucleotide  
  
 <400> 28  
 gtagctgcag gctcaggttc c 21  
  
 <210> 29  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic  
           oligonucleotide  
  
 <400> 29  
 gtggccgtgg tgagcctggc ct 22

<210> 30  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 30  
Pro Pro Ala Leu Ala Leu Ala  
1 5

<210> 31  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 31  
Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Pro Gln Gln Phe  
1 5 10 15

Phe Gly Leu Met  
20